

Sub Code

:

06 CV 42

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IA Marks

:

25

Hrs/ Week

:

04

□

Exam Hours

:

03

Total Hrs.

:

52

□

Exam Marks

:

100

PART – A

UNIT 1:

1 Foundation:

1.1 Preliminary Investigation of Soil,

1.2 Bearing Capacity of Soil

1.2.1. Bearing Capacity of Soil,

1.2.2. Safe Bearing Capacity of Soil

1.3 Classification of Foundations

1.4 Introduction to Different type of foundation,

1.4.1. Masonry footings,

1.4.2. Isolated footings

1.4.3. Combined and strap RCC footings,

1.4.4. Raft footing,

1.4.5. Pile foundations. (Friction and Load bearing piles),

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6 Hours

UNIT 2:

2. Masonry

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2.2. Bonds in Brickwork,

2.2.1 English Bond

2.2.2. Flemish Bond,

2.3. Reinforced brickwork,

2.4. Joints in Stone Masonry

2.5. Rubble Masonry,

2.5.1. Coursed Rubble Masonry,

2.5.2. Uncoursed rubble masonry

2.5.3. Random rubble masonry,

2.6 Ashlar Masonry

8 Hours

UNIT 3:

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3.1.1. Classification,

3.1.2. Stability of an arch □ □ □ □ □ □ □ □ □ □ □ □ □ □ □

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3.2.1 Types and classifications,

3.2.2 Functions,

3.2.3 Method of constructions

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3.3.1 Functions,

3.3.2 Method of constructions,

3.3.3 Canopy,

3.3.4 Functions.

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3.4. Balcony,

3.4.1 Functions,

3.4.2 Method of construction

3.5 Shoring

3.6 Underpinning,

3.7 Scaffolding

7 Hours

UNIT 4:

4. Floors and Roofs

4.1 Types of flooring (Materials and method of laying),

4.1.1 Granolithic

4.1.2 Mosaic

4.1.3 Ceramic

4.1.4 Marble,

4.1.5 Polished Granite,

4.1.6 Industrial flooring

PART – B

UNIT 5:

5. Stairs, Doors and Windows

5.1 Types (Classifications) and Technical terms in

stairs,

5.2 Requirements of a good stair.

5.3 Geometric Design of RCC Dog Legged and

open well stairs. (Plan and sectional elevation of

stairs)

5.4 Doors,

5.4.1 Types,

5.4.1.1 Paneled doors,

5.4.1.2 Glazed doors,

5.4.1.3 Flush doors

5.4.1.4 Collapsible and rolling shutters,

5.4.1.5 Louvered doors,

5.4.1.6 Revolving, sliding and swing doors,

5.5 Windows,

6 Hours

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UNIT 6:

6. Plastering and Painting

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6.2 Materials of plastering,

6.2.1 Lime mortar,

6.2.2 Cement Mortar

6.3 Methods of plastering,

6.3.1 Stucco plastering,

6.3.2 Lath plastering

6.4 Purpose of Painting

6.5 Types of Paints

6.6 Application of paints to new and old surfaces,

6.6.1 Distemper

6.6.2 Plastic emulsion,

6.6.3 Enamel,

6.6.4 Powder coated painting to walls and iron and steel surfaces,

6.6.5 Polishing of wood surface

6 Hours

UNIT 7:

7. Introduction to cost effective construction

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7.2 Advantages,

7.3 Pre fabrication techniques □ □

7.4 Pre cast doors and windows (Pre cast frames

and shutters),

7.5 Alternative Building Materials

7.5.1 Hollow concrete blocks

7.5.2 Stabilized mud blocks

7.5.3 Micro concrete tiles,

7.5.4 Precast roofing elements

6 Hours

8.2 Slip forming

8.3 Damp proof construction

6 Hours

TEXT BOOKS

1. Building Construction by S.G. Rangwala, Charter Publishing House, Anand, India.

2. Building Construction by Sushil Kumar, Standard Publication and Distributors, New Delhi

3. Building Construction by Punmia B.C., Lakshmi Publications, New Delhi.

4. Advanced Building Materials and Construction by Mohan Rai and Jai Sing, CBRI Publications, Roorkee.